

Adela alurgis sp. n. from Syria (Adelidae)

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Abstract. *Adela alurgis* sp. n., described from specimens collected in Syria, is closely related to *A. violella* ([Denis & Schiffermüller], 1775) from which it differs by the purplish colour of the distal part of the forewing, the blackish head, and the silver-grey distal part of the antenna. The male of *A. alurgis* has a hook-like medial protuberance at the base of the valva, a shorter vinculum ($<2.1 \times$ length of valva), a narrower distal part of the valva, and a thick phallus (length to medial diameter ratio around 15).

Key words. *Adela*, Adelidae, taxonomy, Syria.

Introduction

The fairy moth genus *Adela* Latreille, 1796 is clearly defined by the presence of hook-shaped, outwardly directed antennal pegs considered an autapomorphy (Nielsen 1980). Nearctic species of *Adela* have been revised by Powell (1969), while the identities of the East Palaearctic species were examined by Kozlov (1997) and Hirowatari (1997). To date, the European fauna is believed to include 11 species (Karsholt & van Nieukerken 2005), with none reported from Syria (Stainton 1867, van Nieukerken 2005). The nomenclature of some of the European species is debatable, and applications have been made to the International Commission of Zoological Nomenclature to insure the stability of several scientific names including *A. australis* (Kozlov & van Nieukerken 2003) and *A. croesella* (Kozlov 2006).

In the early 1990s, while surveying materials of the Natural History Museum (London), I discovered four specimens labelled by Walsingham as types of *A. alurgis*. This was a manuscript name and for a long time I hesitated to formally describe this species because of its close affinity to *A. violella* ([Denis & Schiffermüller], 1775). However, my investigations of dozens of *A. violella* specimens convinced me that differences between *A. alurgis* and *A. violella* exceed the ‘normal’ range of geographical variation. In this paper I take the risk of introducing this new name in isolation from my comprehensive taxonomic revision of the genus *Adela* that is in progress now, but that won’t be completed within the next few years.

Adela alurgis sp. n.

(Figs. 1–7)

Material. Holotype ♂: Syria, near Aleppo; labelled: 8 mm circle with red border, print ‘Holo- | type’; 8 × 15 mm, print ‘Shar Devesy | HALEB [=Aleppo] | 1893 | (Nat. Coll.) Leech’; 8 × 10 mm, print ‘Walsingham | Collection | 1910-427’; 8 × 18 mm, black frame, black ink + print ‘Adela | alurgis | Type ♂ W | Named by Wlsm.’; 9 × 16 mm, print ‘B. M. | Genitalia slide | No. 29995’; 6 × 18 mm, print ‘HOLOTYPE ♂ | Adela | alurgis Kozlov’. Paratypes: 1 ♀, labelled: 8 mm circle with yellow border, print ‘Para- | type’; 8 × 15 mm, print ‘Shar Devesy | HALEB [=Aleppo] | 1893 | (Nat. Coll.) Leech’; 8 × 10 mm, print ‘Walsingham | Collection | 1910-427’; 8 × 18 mm, black frame, black ink + print ‘Adela | alurgis | Type ♀ W | Named by Wlsm.’; 6 × 18 mm, print ‘PARATYPE ♀ | Adela | alurgis Kozlov’. 2 ♀, labelled: 8 mm circle with yellow border, print ‘Para- | type’; 8 × 15 mm, print + black ink ‘Shar Devesy | HALEB [=Aleppo] | 1893 | (Nat. Coll.) Leech | 61350 [or 61351]’; 8 × 10 mm, print ‘Walsingham | Collection | 1910-427’; 6 × 18 mm, print ‘PARATYPE ♀ | Adela | alurgis Kozlov’. The type specimens are deposited in the Natural History Museum, London.

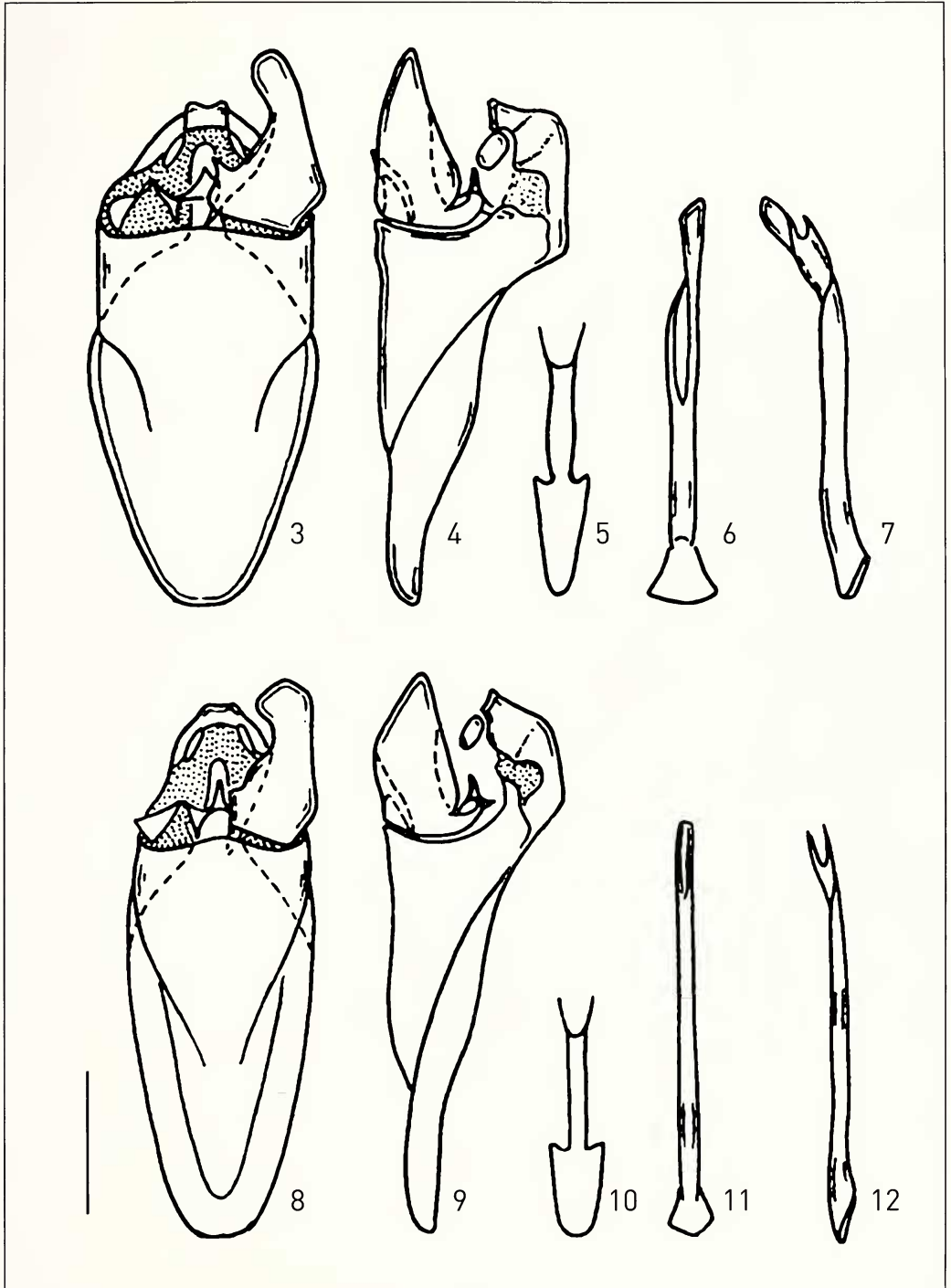


Figs. 1–2. *Adela alurgis*. 1. Male holotype. 2. Female paratype.

Diagnosis. Closest to *A. violella*, from which it differs by the purplish colour of the distal part of the forewing, the blackish head, the silver-grey distal part of the antenna, the presence of a hook-like medial protuberance at the base of the valva, the shorter vinculum ($< 2.1 \times$ length of valva), the narrower distal part of the valva (compare figs. 3–4 and 8–9), and the thick phallus (length to medial diameter ratio around 15; compare figs. 6–7 and 11–12).

Description. Male (Fig. 1). Forewing length 5.6 mm, width / length ratio 0.30. Vertex blackish, with sparse yellow scales; frons light glossy golden. Labial palpus $1.7 \times$ vertical eye diameter, light brown, with blackish raised piliform scales. Proboscis light brown, base with bronze scales. Eyes not enlarged; interocular index 0.6. Antenna $> 2 \times$ forewing length (tip broken). Scape and base of flagellum (up to $0.7 \times$ forewing length) dark bronze, then colour gradually changing to silver-white. Tegulae and thorax dark bronze. Forewing dark bronze basally to purplish bronze apically; cilia purplish to bronze. Hindwing coppery brown; costal area grey; cilia bronze to light brown. Legs from bronze to light yellowish brown. Epiphysis at 0.5, not reaching apex of tibia. Abdomen dorsally dark brown with bronze lustre, ventrally light greyish bronze.

Male genitalia (Figs. 3–7). Tegumen dome-shaped, without medial ridge. Socii oval, $1.0\text{--}1.2 \times$ diameter of phallus. Vinculum $2.0 \times$ length of valva ($2.2\text{--}2.5$ in *A. violella*), wide (seen from ventral side: length / width ratio 1.75, compared to $2.0\text{--}2.2$ in *A. violella*) with slightly convex lateral margins; distal margin nearly straight (shallowly W-shaped in *A. violella*; compare figs. 3 and 8). Valva extending far beyond tip of tegumen; ventral margin with deep indentation; base with hook-like medial protuberance; dorsal margin slightly convex; tip nearly rectangular, narrow (seen from ventral side: distal part of valva $1.5 \times$ medial diameter of phallus, compared to $3\text{--}4$ in *A. violella*). Anellus $0.35 \times$ length of valva. Transtilla with short triangular medial process. Juxta $0.6 \times$ length of phallus, arrow head narrow (width / length ratio 0.45), with rounded tip and short lateral arms. Phallus nearly equal to length of vinculum, almost straight, relatively thick (length to medial diameter ratio around 15, compared to 30 in *A. violella*); distal 0.25 with right wall developed into lobe; with small hook-like process in middle of dorsal side; base of phallus widely funnel-shaped.



Figs. 3-12. *Adela alurgis*, male genitalia. **3.** Genital complex, ventral view (right valva not shown). **4.** Genital complex, lateral view. **5.** Juxta. **6.** Phallus, ventral view. **7.** Phallus, lateral view.
Figs. 8-12. *Adela violella*, male genitalia. **8.** Genital complex, ventral view (right valva not shown). **9.** Genital complex, lateral view. **10.** Juxta. **11.** Phallus, ventral view. **12.** Phallus, lateral view.

Female (Fig. 2). Forewing length 5.1–5.2; antenna 1.3–1.4 × forewing length; basal 0.35–0.45 of flagellum thickened by coppery black scales; distal part of flagellum silvery white. Otherwise similar to male.

Remark. Sattler (1979: 286) mentioned that the correct spelling of the geographical name is ‘Shar Deresy’, and that it may actually belong to Turkey, not Syria. I was unable to clarify the exact position of the type locality.

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